

CLAIMS:

1. A rewritable optical record carrier (100, 200) comprising a recording stack (110, 210) of layers with
 - a first dielectric layer (114, 214),
 - a recording layer comprising a phase-change recording material, and
 - 5 a second dielectric layer (116, 216), characterized in that a thermal barrier layer (122, 222) is arranged adjacent to said first dielectric layer.
2. A rewritable optical record carrier according to claim 1, characterized in that it further comprises a substrate (120) carrying said stack of layers having said thermal barrier layer arranged between said first dielectric layer and said substrate.
10
3. A rewritable optical record carrier according to claim 2, characterized in that the refraction index of said thermal barrier layer is close to the refraction index of said substrate.
15
4. A rewritable optical record carrier according to claim 1, characterized in that it further comprises a cover layer (220) attached to said thermal barrier layer.
5. A rewritable optical record carrier according to claim 4, characterized in that
20 the refraction index of said thermal barrier layer is close to the refraction index of said cover layer.
6. A rewritable optical record carrier according to claim 2 or 3, characterized in that said substrate material is polycarbonate or PMMA.
25
7. A rewritable optical record carrier according to claim 4 or 5, characterized in that said cover layer material is polycarbonate or transparent polymer resin..

8. A rewritable optical record carrier according to anyone of the preceding claims, characterized in that said thermal barrier layer material comprises SiO_2 or Al_2O_3 as its major component.
- 5 9. A rewritable optical record carrier according to anyone of the preceding claims, characterized in that said first and second dielectric layer materials comprise one of the following components or a mixture thereof: ZnS , SiO_2 , Si_3N_4 , Al_2O_3 or Ta_2O_5 .
10. A rewritable optical record carrier according to anyone of the preceding
10 claims, characterized in that said phase-change recording material comprises a mixture of Ge, In, Sb, and Te.